

Release notes for ENDF/B Development e-072_Hf_000
evaluation

ENDF
B-VII.dev

October 13, 2016

• fudge-4.0 Warnings:

1. Mislabelled emitted particle
Reading ENDF file: ../e-072_Hf_000.endf (Error # 0): ZAP messed up

 WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0
2. FIXME: Generic fudge unimplemented message
reaction label 1: e- + Hf + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)

 WARNING: Checking not yet implemented for energyLoss type data
3. FIXME: Generic fudge unimplemented message
reaction label 2: e- + Hf [excitation] / Product: e- (Error # 0): Generic unimp (c)

 WARNING: Checking not yet implemented for energyLoss type data

• fudge-4.0 Errors:

1. Calculated and tabulated thresholds don't agree
reaction label 0: e- + Hf [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

 WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!
2. Calculated and tabulated thresholds don't agree
reaction label 1: e- + Hf + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

 WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!
3. Calculated and tabulated thresholds don't agree
reaction label 2: e- + Hf [excitation] / Cross section: (Error # 0): Threshold mismatch

 WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!
4. Calculated and tabulated thresholds don't agree
reaction label 3: e- + e- + Hf1s1/2 / Cross section: (Error # 0): Threshold mismatch

 WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 65482. eV!
5. Calculated and tabulated thresholds don't agree
reaction label 4: e- + e- + Hf2s1/2 / Cross section: (Error # 0): Threshold mismatch

 WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 11245. eV!
6. Calculated and tabulated thresholds don't agree
reaction label 5: e- + e- + Hf2p1/2 / Cross section: (Error # 0): Threshold mismatch

 WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10763. eV!
7. Calculated and tabulated thresholds don't agree
reaction label 6: e- + e- + Hf2p3/2 / Cross section: (Error # 0): Threshold mismatch

- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 9558.299999999999 eV!
8. Calculated and tabulated thresholds don't agree
reaction label 7: $e^- + e^- + \text{Hf}3s1/2$ / Cross section: (Error # 0): Threshold mismatch
- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2576. eV!
9. Calculated and tabulated thresholds don't agree
reaction label 8: $e^- + e^- + \text{Hf}3p1/2$ / Cross section: (Error # 0): Threshold mismatch
- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2358.1 eV!
10. Calculated and tabulated thresholds don't agree
reaction label 9: $e^- + e^- + \text{Hf}3p3/2$ / Cross section: (Error # 0): Threshold mismatch
- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2099. eV!
11. Calculated and tabulated thresholds don't agree
reaction label 10: $e^- + e^- + \text{Hf}3d3/2$ / Cross section: (Error # 0): Threshold mismatch
- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1725.5 eV!
12. Calculated and tabulated thresholds don't agree
reaction label 11: $e^- + e^- + \text{Hf}3d5/2$ / Cross section: (Error # 0): Threshold mismatch
- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1668.7 eV!
13. Calculated and tabulated thresholds don't agree
reaction label 12: $e^- + e^- + \text{Hf}4s1/2$ / Cross section: (Error # 0): Threshold mismatch
- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 525.6900000000001 eV!
14. Calculated and tabulated thresholds don't agree
reaction label 13: $e^- + e^- + \text{Hf}4p1/2$ / Cross section: (Error # 0): Threshold mismatch
- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 435.27 eV!
15. Calculated and tabulated thresholds don't agree
reaction label 14: $e^- + e^- + \text{Hf}4p3/2$ / Cross section: (Error # 0): Threshold mismatch
- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 375.82 eV!
16. Calculated and tabulated thresholds don't agree
reaction label 15: $e^- + e^- + \text{Hf}4d3/2$ / Cross section: (Error # 0): Threshold mismatch
- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 225.59 eV!
17. Calculated and tabulated thresholds don't agree
reaction label 16: $e^- + e^- + \text{Hf}4d5/2$ / Cross section: (Error # 0): Threshold mismatch
- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 214.71 eV!
18. Calculated and tabulated thresholds don't agree
reaction label 17: $e^- + e^- + \text{Hf}4f5/2$ / Cross section: (Error # 0): Threshold mismatch
- WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 27.26 eV!

19. Calculated and tabulated thresholds don't agree
reaction label 18: $e^- + e^- + Hf4f7/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 25.4 eV!

20. Calculated and tabulated thresholds don't agree
reaction label 19: $e^- + e^- + Hf5s1/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 72.56 eV!

21. Calculated and tabulated thresholds don't agree
reaction label 20: $e^- + e^- + Hf5p1/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 46.34 eV!

22. Calculated and tabulated thresholds don't agree
reaction label 21: $e^- + e^- + Hf5p3/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 38.1 eV!

23. Calculated and tabulated thresholds don't agree
reaction label 22: $e^- + e^- + Hf5d3/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5.75 eV!

24. Calculated and tabulated thresholds don't agree
reaction label 23: $e^- + e^- + Hf5d5/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5.18 eV!

25. Calculated and tabulated thresholds don't agree
reaction label 24: $e^- + e^- + Hf6s1/2$ / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 6.86 eV!

• **xsectplotter** Warnings:

1. Mislabelled emitted particle
Error: ZAP messed up

stderr while processing crossSection

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0
... [4 more lines]